

## **NEWS RELEASE**

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## High Performance Computing Modernization Program Dramatically Expands HPC Capabilities in Department of Defense

The Department of Defense, DoD, High Performance Computing Modernization Program (HPCMP) has just completed its fiscal year 2013 investment in supercomputing capability supporting the DoD science, engineering, test and acquisition communities. The total acquisition is valued at \$50 million, including acquisition of multiple supercomputing systems and hardware and software maintenance services. At nearly three petaFLOPS of computing capability, the acquisition constitutes a larger than 50 percent increase in the DoD HPCMP's current peak computing capability.

"Supercomputing is a key enabler across the broad spectrum of efforts in the science, technology, test, evaluation, and acquisition engineering communities of the DoD as they continue their critical work to improve both the safety and performance of U.S. military forces," observed John West, director of the HPCMP. "These newly acquired systems ensure that the DoD's scientists and engineers will continue to be able to take advantage of a robust computing ecosystem that includes the latest computational technologies."

The purchase includes three systems that will collectively provide more than 114,000 cores, over 307 terabytes of memory, and a total disk storage capacity of almost nine petabytes. The competitive government acquisition was executed through the U.S. Army Engineering and Support Center in Huntsville, Ala., which selected Cray, Inc. as the HPC vendor.

The supercomputers will be installed at two of the HPCMP's five DoD Supercomputing Resource Centers (DSRCs), and will serve users from all of the services and agencies of the department:

 The Air Force Research Laboratory DSRC at Wright-Patterson Air Force Base, Ohio, will receive a Cray XC30 system built upon the 2.7 GHz Intel Xeon E5-2697 v2 ("Ivy Bridge EP") processor. This system consists of 56,112 compute cores and 150 terabytes of memory.  The Navy DSRC, of the Naval Meteorology and Oceanography Command located at Stennis Space Center, Miss., will receive two Cray XC30 systems built upon the 2.7 GHz Intel Xeon E5-2697 v2 processor and the 1.05 GHz Intel Xeon Phi Coprocessor 5120D. These two systems are identical, each consisting of 29,304 compute cores, 7,440 coprocessor cores, and 78 terabytes of memory. The systems are designed as sister systems to provide continuous service during maintenance outages.

The HPCMP partners with the DoD's science and engineering communities and serves as an innovation enabler. The use of HPC in the DoD is quite broad and includes capabilities in fluid dynamics, structural mechanics, materials design, space situational awareness, climate and ocean modeling, and environmental quality.

## About the DoD High Performance Computing Modernization Program (HPCMP)

The HPCMP provides the Department of Defense supercomputing capabilities, high-speed network communications and computational science expertise that enable DoD scientists and engineers to conduct a wide-range of focused research, development and test activities. This partnership puts advanced technology in the hands of U.S. forces more quickly, less expensively, and with greater certainty of success. Today, the HPCMP provides a complete advanced computing environment for the DoD that includes unique expertise in software development and system design, powerful high performance computing systems, and a premier wide-area research network. The HPCMP is managed on behalf of the Department of Defense by the U.S. Army Engineer Research and Development Center.

For more information, please visit our website at: www.hpc.mil.